CALIFORNIA FARM BUREAU FEDERATION

NATURAL RESOURCES AND ENVIRONMENTAL DIVISION

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October 15, 2010

Sent via E-mail
cdibble@dfg.ca.gov

Department of Fish and Game
Attn: Chad Dibble - Water Branch
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Re: Comment on the Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta

Dear Mr. Dibble:

The California Farm Bureau Federation is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 81,000 members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

General Comments:

Senate Bill 7X 1 (Steinberg) took the novel approach of calculating the water needs of fish in isolation from, and without recognition of, other competing beneficial uses of water. This approach forces several fundamental questions.

Most notably perhaps, it gives us a hypothetical profile of the amount of water experts like the Fish and Game Department believe Delta-dependent aquatic species require.

The resulting ecological water profile is quite different from the way we currently store, move, and use water in California—so far different, in fact, as to suggest the two approaches may well be incompatible.

Humans have altered the natural landscape in obvious ways. Generally, humans have modified the landscape to suit human needs. In the course of this process, human communities have grown up and adapted in reliance on a set of existing conditions that represents a considerable departure from the pre-existing natural regime.

Reversing this process, on a scale and to a degree consistent with what the Department and other experts say species and natural systems optimally require, would appear to require wholesale abandonment of a whole class of human activities formerly deemed desirable for the convenience, sustenance, and welfare of human society.

Farm Bureau thanks the Department, the Legislature, and also the State Water Resources Control Board, for its clear delineation of the patent conflict between present human uses of water in California today, and a purely biological conception of the water needs of fish and the environment of the kind here advanced by the Department.

On the other hand, we question the practical usefulness of such information, in the absence of appropriate balancing with other beneficial uses of water.

Particularized Comments:

Executive Summary, Page 1:

> "[F]low is not the only factor affecting ecosystem health and the decline of fish populations in the Delta. Other factors such as non-native clams, habitat loss, and contaminants can adversely affect the ecosystem by reducing overall productivity and affecting nutrient dynamics and the base of the foodweb."

The fundamental truth of this statement cannot be overemphasized. In fact, DFG's own recently released "Report to the California Fish and Game Commission on Stressors Impacting the Delta Related Organisms" to the California Fish and Game Commission underlines this point with usual candor. According to the conclusions of that report, nutrients (nitrogen and ammonia), contaminants in urban runoff, seasonal blooms of toxic algae, and introduced species are top tier factors currently "stressing" species and the Delta environment. Moreover, per an appended analysis by the National Marine Fisheries Service, predation is a major source of mortality for out-migrating juvenile salmon and steelhead.[1]

Executive Summary, Pages 1-2:

> "Several factors outside the scope of this legislative mandate would need be considered and modeled or analyzed more fully (e.g., cold water pool management in upstream reservoirs, operational constraints, habitat restoration, and the relationship between flow criteria and unimpaired flow) before any flow standards are set. In addition, capital facility improvements, such as an alternative conveyance system, relocated water intakes, enhancement of floodplain and tidal wetlands, and additional fish screening may serve to improve conservation in the Delta. Flows by themselves are not the only consideration when the goal is the overall health of the estuary."

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[1] See DFG's July 28, 2010 "Report to the California Fish and Game Commission on Stressors Impacting Delta Related Organisms" at http://www.dfg.ca.gov/delta/reports/Delta-Organisms-Stressors-Report-20100728.pdf.

The point is well taken.

Executive Summary, Page 4:

> "DFG encourages the SWRCB's continued commitment to ensure impacts on beneficial uses of the Delta are comprehensively addressed when balancing environmental protection and water supply reliability. The SWRCB's flow criteria report along with DFG's biological objectives and flow criteria will serve an important role in providing the scientific foundation for future water quality control planning activities, water rights proceedings, and Comprehensive Delta Plan and BDCP development. The balancing of needs in these regulatory efforts can only take place when the proposed projects are fully described and presented in the context of the available scientific understanding provided in the flow criteria documents. These reports serve to inform the BDCP goals and objectives and help to ensure the BDCP Conservation Strategy includes measures that will provide for the conservation of terrestrial and aquatic species and natural communities while achieving water supply and water quality goals for the Delta."

While recommendations such as DFG's objectives and criteria may assist in such processes, any regulatory proposal or result must ultimately accommodate all existing beneficial uses in an equitable and legally defensible manner.

Draft Objectives & Criteria, page 1:

> "Water flow through the Delta is one of the primary drivers of ecosystem function. The timing, magnitude, and quality of flows all influence habitat features such as temperature, turbidity, transport, nutrient loadings, pollutant dispersal, and other factors."

This functional view of instream flow is more useful than a view of flows as mere volumes of water.

Draft Objectives & Criteria, page 11:

> "[G]oals" are defined as a future desired outcome or state. Goals provide direction and focus on ends rather than means. [...] "Objectives" are statements of action that are clear, realistic, specific, and measurable. [...] Notwithstanding the descriptions of "flow criteria" in the Delta Reform Act, flow criteria are considered to be equivalent to performance measures. Performance measures are indicators of progress toward meeting prescribed objectives.

"Biological goals and objectives" and "best available science" are terms or art which have legal significance in an ESA context. It is not clear that these terms have the same meaning in DFG's objectives and criteria recommendations or in the context of Water Code sections 85084.5 and

85086. Given the extremely short time frame within which these objectives and criteria were developed, it seems fairly clear that these terms are used in a less rigorous sense.

Draft Objectives & Criteria, pages Page 13:

> "Understanding flow and species needs in the Delta is a complex and difficult task. Several interrelated factors must be balanced in order to comprehensively manage water resources in the Delta. These factors include: Delta outflows, Delta inflows, in-Delta water diversions, water quality, coldwater pool management, hydrology, hydrodynamics, tidal action, and project operations. The recommendations in this report represent DFG's current understanding of the flow needs of the individual species identified in order to meet DFG's biological objectives. Several factors outside the scope of this legislative mandate must be considered and modeled more fully (e.g., cold water pool management in upstream reservoirs, operational constraints, and the relationship between flow criteria and unimpaired flow) before any flow standards are set."

This statement is correct and highlights the importance of focusing available resources. Many efforts to date have been fragmented, under-resourced, uncoordinated and even conflicting. With a problem as difficult as the current crisis in the Delta, it is critically important that all interested parties better coordinate and focus shared resources on shared solutions.

Draft Objectives & Criteria, pages 15-16:

> *"Both California's water supply and the ecological resources of the Delta are of paramount importance. They are co-equal: each is indispensable to California as a whole, and our actions must secure the future of both. [...] But problems in the Delta can be solved only as part of a comprehensive effort to improve statewide water management and ecosystem management. [...] The loss of a reliable supply of water from the Delta could lead to substantial economic hardships because large fractions of the state's water supply must come from the Delta watershed. [...] [E]ach [of the co-equal goals] is indispensable to the whole state and that each must be advanced in any decision."*

The Department and others seeking to finding solutions to the Delta's ecological ailments would do very well to bear these dual policy goals in mind.

Draft Objectives & Criteria, page 16:

> "This report addresses only the goals for protection of public trust resources. As decisions for allocating water are identified and proposed, the necessary balancing must be completed as required by the Water Code."

The point is well taken.

Draft Objectives & Criteria, page 96:

> "7. Some invasive species negatively influence native species abundance. The best evidence is the negative effects of overbite clam and several species of aquatic plants. Certain flows in and through the Delta may influence these undesirable species."
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> "8. Ammonia does not appear to be acutely or chronically toxic to delta smelt and other species. More research is needed on the effects of nutrients on Delta ecosystem and its foodweb."

There is in fact mounting evidence to support the hypothesis that introduced species, Delta nutrient loading, and other factors are having a significant 'bottom-up' effect on species of interest in the Delta. Failure to ground flow-based proposals such as DFG's objectives and criteria within the broader context of such non-flow-based stressors will predictably lead to flawed objectives that fail to produce desired results.

Table 16: DFG Flow Criteria:

Without quantification of the water supply impact of the flow criteria, the flow criteria depicted in this table do not provide any basis for comparison to existing conditions, including the consumptive use requirements of other beneficial uses in the system. This has a direct bearing on the feasibility of the proposed criteria.

Appendix A of the Draft Report on the Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem: Summary Table of All Flow Recommendations Made During the Water Board's Informational Proceeding (Appendix A in SWRCB (2010)

The water supply cost of the SWRCB flow criteria recommendations here presented was preliminarily calculated in Appendix B to the Water Board's Draft Flow Criteria at some 5.4 million acre-feet. In addition, the preliminary modeling showed a dramatic increase of the frequency of "dead pool" occurrences in the State's major North State reservoirs, with dire implications for threatened and endangered cold-water-dependent species. Obviously, in a semi-arid State that is home to 36 million inhabitants, as well as 7 million acres of some of the most productive and diverse farmland in the world, the feasibility of such a proposal is called sharply into question.

Sincerely,

Justin E. Fredrickson
Environmental Policy Analyst

cc: Charlie Hoppin, SWRCB
Phil Isenberg, Delta Stewardship Council